



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,846	01/13/2005	Sung Yoon Kim	260977US6PCT	7194
22850	7590	05/13/2010	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				SCHWARTZ, DARREN B
ART UNIT		PAPER NUMBER		
2435				
NOTIFICATION DATE			DELIVERY MODE	
05/13/2010			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/519,846	KIM ET AL.	
	Examiner	Art Unit	
	DARREN SCHWARTZ	2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 05 April 2010.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2,4-6,8-20 and 23-25 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,2,4-6,8-20 and 23-25 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Applicant corrects minor issues of formality.

Claims 1, 2, 4-6, 8-20 and 23-25 are re-presented for examination.

Response to Arguments

While it was agreed between the Primary Examiner, Applicant & Applicant's Representative a *prima facie* case was deficient, the Examiner sets forth a new grounds of rejection *infra*.

To the extent Applicant's arguments may apply, the Examiner introduces Sugahara et al (U.S. Pat App Pub 2001/0009006 A1).

The fact that the Examiner may not have specifically responded to any particular arguments made by Applicant and Applicant's Representative, should not be construed as indicating Examiner's agreement therewith.

Claim Objections

Claim 1 is objected to because of the following informalities:

Claim 1 recites, *at least*, "means for receiving grouped device identification information and key information, for receiving key information, ... and for receiving the license"

The claim should probably read, "means for receiving grouped device identification information and key information, **means** for receiving key information, ... and **means** for receiving the license"

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 4-6, 9-15, 17, 19, 20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (U.S. Pat App Pub 2002/0114466 A1), hereinafter referred to as Tanaka, Sugahara et al (U.S. Pat App Pub 2001/0009006 A1), hereinafter referred to as Sugahara and Alain et al (U.S. Pat App Pub 2003/0110131 A1), hereinafter referred to as Alain, in further view of Sitaraman et al (U.S. Pat 6430619 B1), hereinafter referred to as Sitaraman.

Re claim 1: Tanaka teaches an information device comprising:

means for storing an encrypted content (¶7; ¶16; ¶83, right column) and a license (¶8); means for reading out the license based on the encrypted content (Fig 5, elt “Lic.ID;” Fig 6, elt S41; Fig 8, elt “LICENSE ID”);

[means] for reading out the key information based on the grouped device identification information (¶108; ¶271); and [means] for decrypting the encrypted content based on the key information (Fig 19; ¶41; ¶174-¶177).

However, Tanaka does not expressly disclose means for reading out the grouped device identification information based on the license.

Sugahara teaches means for reading out the grouped device identification information based on the license (Fig 2, elts 4 & “GROUP ID;” ¶35; ¶57; ¶60; ¶74).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Tanaka with the teachings of Sugahara, for the purpose of providing more flexibility in secure content distribution by associating the encoded content information with group identification information; the clear advantage known to one of ordinary skill is to allow a plurality of users to access secure content.

However, the combination of Tanaka and Sugahara does not expressly disclose means for receiving grouped device identification information, means for receiving key information, in response to a transmission of device identification information of the information device.

Alain teaches means for receiving grouped device identification information [Fig 2c.1, elements: "Group B," "Group C;" Fig 2c.2, elements: "group ID," "user/group ID;" ¶103], means for receiving key information [Fig 2c.1, elements: "File Key B," "File Key C;" Fig 2c.2, element "file key;" ¶103] (¶73), in response to a transmission of device identification information of the information device (page 19, right column, lines 1-15); and for receiving the license based on the grouped device identification information (Fig 2c.1; ¶73; ¶102).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Tanaka and Sugahara with the teachings of Alain, for the purpose of securely providing digital content to a plurality of devices wherein the devices are owned by a single user. Both references are within the

same realm of endeavor as both references are directed to securely distributing digital content to a plurality of users.

The combination of Tanaka, Sugahara and Alain does not expressly disclose a determination that fewer than a predetermined number of information devices are associated with the grouped device identification information.

Sitaraman teaches a determination that fewer than a predetermined number of information devices are associated with the grouped device identification information (col 5, lines 44-47; col 5, lines 57-67; col 6, lines 27-31; col 6, lines 55-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Tanaka, Sugahara and Alain with the teachings of Sitaraman, for the purpose of limiting the number of simultaneous communications sessions and sustaining high QoS to a plurality of devices; Sitaraman establishes limiting the number of connecting / communicating devices to prevent "denial of service."

Re claim 2: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches the license includes license identification information (Tanaka: Fig 5, particularly elt: "Lic. ID;" Fig 8) and the group device identification information (Alain: Fig 2c.1, elements: 238, "Id B," "id C" & "id D").

Re claim 4: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches means for transmitting the transmission to an information server (Tanaka: Fig 1, elt 2; ¶3; ¶73).

Re claim 5: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches the means for receiving receives the grouped device identification information and the key information from the information server (Alain: Fig 2C.1, elt 238; ¶170-¶171).

Re claim 6: The combination of Tanaka, Alain and Sitaraman teaches means for storing stores the device identification information, which uniquely identifies the information device from the information devices (Tanaka: ¶14; ¶113).

Re claim 10: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches the key information, corresponds to a device node key allocated to the information devices, the device node key being a node in a bottom layer among a plurality of node keys in a hierarchical tree structure, wherein each of the plurality of node keys is encrypted and corresponds to a different node in the hierarchical tree structure, which branches off from a top layer to the bottom layer, the encrypted content, is multiply encrypted by each of the plurality of node keys on a path in the hierarchical tree structure from the device node key to a root key, the root key being one of the plurality of node keys in the top layer of the hierarchical tree structure, and the means for reading out sequentially decrypts each of the node keys on the path from the bottom layer to the top layer in the hierarchical tree structure, using the key information as the device node key to obtain the root key, and then decrypts the encrypted content by using the obtained root key (Tanaka: Figs 12, 18A, 18B & 18C; ¶137-¶140).

Re claim 11: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches the encrypted content, is encrypted by a content key that is encrypted by the root key, and the means for reading out decrypts the content key by using the root key,

and then decrypts the encrypted content using the content key (Alain: ¶63-¶64; Tanaka: ¶11).

Re claim 12: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches the encrypted content, includes at least one of text data, still image data, moving image data, or voice data (Alain: ¶58).

Re claim 13, 20 and 23-25: Claims 13, 20 and 23-25 are rejected under similar grounds as those provided in claim 1 *supra*.

Re claim 14: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches means for transmitting a license based on the grouped device identification information, the license identifying the grouped device identification information and being identified by the encrypted content (Alain: Fig 2c.1; ¶73; ¶102).

Re claim 15: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches the means for determining refuses a device registration request from an information device, after a number of the information devices reaches the predetermined number (Sitaraman: col 5, lines 44-47; col 5, lines 57-67; col 6, lines 27-31; col 6, lines 55-61).

Re claim 17: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches means for determining whether to charge for transmitting the license from the information server (Tanaka: ¶74), based on whether the grouped device identification information has been provided by the information server (Tanaka: ¶74; ¶160).

Re claims 9 and 18: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches information devices are owned by one user (Alain: ¶175).

2. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (U.S. Pat App Pub 2002/0114466 A1), hereinafter referred to as Tanaka, Sugahara et al (U.S. Pat App Pub 2001/0009006 A1), hereinafter referred to as Sugahara. Alain et al (U.S. Pat App Pub 2003/0110131 A1), hereinafter referred to as Alain and Sitaraman et al (U.S. Pat 6430619 B1), hereinafter referred to as Sitaraman, in further view of Oho et al (U.S. Pat App Pub 2002/0184515 A1), hereinafter referred to as Oho.

Re claim 8: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches all the limitations of claim 6 as previously stated.

However, Oho teaches means for requesting the information server to delete from the information server the unique device identification information (Oho: ¶67; ¶233; ¶235).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Tanaka, Sugahara, Alain and Sitaraman with the teachings of Oho, for the purpose of transferring content licenses from one device to another device.

Re claim 16: The combination of Tanaka, Sugahara, Alain and Sitaraman teaches all the limitations of claim 14 as previously stated.

However, Oho teaches means for determining deletes the device identification information, which is specified by a device registration deletion request from the one of the plurality of information devices (¶67; ¶233; ¶235).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Tanaka, Sugahara, Alain and Sitaraman with the teachings of Oho, for the purpose of providing limiting the number of devices while sustaining high QoS to a plurality of devices.

3. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oho et al (U.S. Pat App Pub 2002/0184515 A1), hereinafter referred to as Oho, Sugahara et al (U.S. Pat App Pub 2001/0009006 A1), hereinafter referred to as Sugahara and Alain et al (U.S. Pat App Pub 2003/0110131 A1), hereinafter referred to as Alain, in further view of Sitaraman et al (U.S. Pat 6430619 B1), hereinafter referred to as Sitaraman.

Re claim 19: Oho teaches an information processing system, comprising:
an information server (¶2; ¶172); and
an information device configured to receive a service from the information server through communication lines (¶7), wherein, the information server includes,
means for providing key information in response to a receipt of device identification information of an information device (Fig 11, particularly steps S21, S22 & S217);
means for storing the encrypted content, the license, the grouped device identification information, and the key information (Fig 2, see at least elts 111, 113 & 114; Fig 7A).

However, Sugahara teaches the grouped device identification information identifying the key information (Fig 2, elts 4 & “GROUP ID;” ¶35; ¶57; ¶60; ¶74), the key

information decrypting an encrypted content (Fig 1, elts: "CONTENTS INFORMATION" → 2 → "ENCRYPT-RESULT CONTENTS INFORMATION" → 10 → "CONTENTS INFORMATION")

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho with the teachings of Sugahara, for the purpose of providing more flexibility in secure content distribution by associating the encoded content information with group identification information; the clear advantage known to one of ordinary skill is to allow a plurality of users to access secure content.

However, Alain teaches means for transmitting a license based on the grouped device identification information [Fig 2c.1, elements: "Group B," "Group C;" Fig 2c.2, elements: "group ID," "user/group ID;" ¶103] (¶73; ¶102), the license identifying the grouped device identification information [Fig 2B, elts 222, 229 & 230] and being identified by the encrypted content [Fig 2B, elt 224] (Fig 2B, elts 222 & 229), and the information device includes,

means for reading out the license based on the encrypted content, for reading out the grouped device identification information based on the license for reading out the key information based on the grouped device identification information, and for decrypting the encrypted content based on the key information (Fig 4C, elts: 462-466, 468 & 470).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho and Sugahara with the

teachings of Alain, for the purpose of securely providing digital content to a plurality of devices wherein the devices are owned by a single user. Both references are within the same realm of endeavor as both references are directed to securely distributing digital content to a plurality of users.

Sitaraman teaches means for determining that fewer than the predetermined number of information devices are associated with the grouped device identification information and means for determining whether fewer than a predetermined number of information devices are associated with grouped device identification information (col 5, lines 44-47; col 5, lines 57-67; col 6, lines 27-31; col 6, lines 55-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho, Sugahara and Alain with the teachings of Sitaraman, for the purpose of limiting the number of simultaneous communications sessions and sustaining high QoS to a plurality of devices; Sitaraman establishes limiting the number of connecting / communicating devices to prevent "denial of service."

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed

invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARREN SCHWARTZ whose telephone number is (571)270-3850. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S./
Examiner, Art Unit 2435
/Kimyen Vu/
Supervisory Patent Examiner, Art Unit 2435